Remarks

In the Office Action dated November 16, 2004, the Examiner maintained the rejection of claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,646,917 to Miyoshi, et al. (hereinafter Miyoshi) in view of U.S. Patent No. 5,486,727 to Heidelberg, et al. (hereinafter Heidelberg). No amendments are presented herein.

With respect to the Examiner's rejections, the Examiner is invited to consider the following remarks.

Independent claim 1 provides an automated library system that comprises at least one robot that comprises a drive mechanism coupled to drive wheels that ride in at least one rail and rotate to move the robot about within the automated library system. (Claim 1, lines 14-16).

Miyoshi and Heidelberg, alone or in combination, fail to provide the features of the presently pending claim 1 and the rejection should be withdrawn. In particular, Miyoshi teaches a horizontal carrier that has a magnet to form a magnetic field passing through a plurality of coils that are sequentially excited to move the carrier in the moving direction. (Miyoshi, Abstract). Miyoshi further teaches a guide rail device is adapted to move the carrier by a magnetic force generated between the guide rail device and the carrier. (Miyoshi, Fig. 5 and col. 3, 11. 64-67). Heidelberg teaches a linear accelerator that has at least one longitudinal stator section that defines a linear path of movement and that comprises several stator coils as well as a rotor with several rotor coils that can be accelerated along the path of movement. The design and arrangement of the rotor coils and stator coils allow a circular magnetic field to be generated, with the result that the rotor is axially accelerated. (Heidelberg, Abstract). As such, Heidelberg fails to cure the deficiencies of Miyoshi.

In particular, nowhere does any combination of Miyoshi and Heidelberg teach, disclose or suggest a drive mechanism coupled to drive wheels that ride in at least one rail and rotate to move the robot about within the automated library system as recited in claim 1 at lines

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14-16. In fact and to the contrary, both Miyoshi and Heidelberg teach against such a limitation. Since the cited references, alone or in combination, fail to teach, disclose or suggest the claimed invention, a *prima facie* case of obviousness under 35 U.S.C. § 103(a) has not been established, and the rejection should be withdrawn.

Independent claim 10 provides a robot for use in an automated library system and the robot comprises a frame and a drive mechanism attached to the frame and coupled to drive wheels that ride in at least one rail in the automated library system and rotate to move the robot about within automated library system. (Claim 10, lines 5-7).

Miyoshi and Heidelberg, alone or in combination, fail to provide the features of the presently pending claim 10 and the rejection should be withdrawn. In particular, Miyoshi teaches a horizontal carrier that has a magnet to form a magnetic field passing through a plurality of coils that are sequentially excited to move the carrier in the moving direction. (Miyoshi, Abstract). Miyoshi further teaches a guide rail device is adapted to move the carrier by a magnetic force generated between the guide rail device and the carrier. (Miyoshi, Fig. 5 and col. 3, 1l. 64-67). Heidelberg teaches a linear accelerator that has at least one longitudinal stator section that defines a linear path of movement and that comprises several stator coils as well as a rotor with several rotor coils that can be accelerated along the path of movement. The design and arrangement of the rotor coils and stator coils allow a circular magnetic field to be generated, with the result that the rotor is axially accelerated. (Heidelberg, Abstract). As such, Heidelberg fails to cure the deficiencies of Miyoshi.

In particular, nowhere does any combination of Miyoshi and Heidelberg teach, disclose or suggest a drive mechanism coupled to drive wheels that ride in at least one rail and rotate to move the robot about within the automated library system as recited in claim 10 at lines 5-7. In fact and to the contrary, both Miyoshi and Heidelberg teach against such a limitation. Since the cited references, alone or in combination, fail to teach, disclose or suggest the claimed invention, a *prima facie* case of obviousness under 35 U.S.C. § 103(a) has not been established, and the rejection should be withdrawn.

Independent claim 17 provides method of operating an automated library system having at least one robot and using a drive mechanism on the robot, wherein the drive mechanism is coupled to drive wheels that ride in at least one rail in the automated library system and rotate to provide the movement of the robot. (Claim 17, lines 11-13).

Miyoshi and Heidelberg, alone or in combination, fail to provide the features of the presently pending claim 17 and the rejection should be withdrawn. In particular, Miyoshi teaches a horizontal carrier that has a magnet to form a magnetic field passing through a plurality of coils that are sequentially excited to move the carrier in the moving direction. (Miyoshi, Abstract). Miyoshi further teaches a guide rail device is adapted to move the carrier by a magnetic force generated between the guide rail device and the carrier. (Miyoshi, Fig. 5 and col. 3, 11. 64-67). Heidelberg teaches a linear accelerator that has at least one longitudinal stator section that defines a linear path of movement and that comprises several stator coils as well as a rotor with several rotor coils that can be accelerated along the path of movement. The design and arrangement of the rotor coils and stator coils allow a circular magnetic field to be generated, with the result that the rotor is axially accelerated. (Heidelberg, Abstract). As such, Heidelberg fails to cure the deficiencies of Miyoshi.

In particular, nowhere does any combination of Miyoshi and Heidelberg teach, disclose or suggest a drive mechanism coupled to drive wheels that ride in at least one rail in the automated library system and rotate to provide the movement of the robot as recited in claim 17 at lines 11-13. In fact and to the contrary, both Miyoshi and Heidelberg teach against such a limitation. Since the cited references, alone or in combination, fail to teach, disclose or suggest the claimed invention, a *prima facie* case of obviousness under 35 U.S.C. § 103(a) has not been established, and the rejection should be withdrawn.

Furthermore, regarding independent claim 10, that claim provides the secondary coil is electrically connected to an electronics circuit. The electronics circuit is disposed on the frame of the robot and is in communication with the drive mechanism and the automated

library system to facilitate control of the drive mechanism in accordance with commands from the controller. (Claim 10, lines 8-10).

Neither of the prior art references cited by the Examiner, alone or in combination, teach or suggest a robot comprising an electronic circuit that is in communication with a drive mechanism and an automated library system to facilitate control of the drive mechanism in accordance with commands from a library system controller, as set forth in claim 10 at lines 8-10. Since the cited references, alone or in combination, fail to teach, disclose or suggest the claimed limitation of a secondary coil that is electrically connected to an electronics circuit, and the electronics circuit is disposed on the frame and is in communication with the drive mechanism and the automated library system to facilitate control of the drive mechanism in accordance with commands from the controller, a *prima facie* case of obviousness under 35 U.S.C. § 103(a) has not been established, and the rejection should be withdrawn.

Regarding claims which depend from independent claims 1, 10 and 17, Applicants contend that these claims are patentable for at least the same reasons that claims 1, 10 and 17 are patentable. Moreover, Applicants contend these claims recite further limitations, in addition to the limitations of claims 1, 10 and 17, which render these claims additionally patentable.

Applicants have made a *bona fide* effort to respond to the Examiner's rejections in advancing the prosecution of this case. The references cited by the Examiner, alone or in any combination, simply fail to disclose, teach or suggest all of the limitations of the presently pending independent claims. In the case of all of the independent claims 1, 10 and 17, the references cited by the Examiner, alone or in any combination, fail to disclose, teach or suggest a drive mechanism coupled to drive wheels that ride in at least one rail and rotate to move the robot about within the automated library system. To the contrary, Miyoshi and Heidelberg both teach against such a limitation. Further, in the case of independent claim 10, the references cited by the Examiner, alone or in any combination, fail to disclose, teach or

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suggest a robot comprising an electronic circuit that is in communication with a drive

mechanism and an automated library system to facilitate control of the drive mechanism in

accordance with commands from a library system controller. As such, Applicants believe all

formal and substantive requirements for patentability have been met and that this case is in

condition for allowance, which action is respectfully requested.

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is enclosed for that purpose.

The Examiner is respectfully requested to telephone the undersigned to discuss

prompt resolution of any remaining issues necessary to place this case in condition for

allowance.

Respectfully submitted,

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Date: <u>January 15, 2005</u>

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